

Cherry Creek Railroad Bridge
Platte River Valley Area
Denver
Denver County
Colorado

HAER No. CO-58

HAER
COLO,
16-DENY,
54-

PHOTOGRAPHS HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
Department of the Interior
National Park Service
Rocky Mountain Regional Office
P.O. Box 25287
Denver Colorado 80225

HISTORIC AMERICAN ENGINEERING RECORD

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Cherry Creek Railroad Bridge

HAER No. CO-58

Location: Spanning Cherry Creek, north of Delgany Street
Denver, Denver County, Colorado

UTM: 13.499600.4399800
Quad: Arvada

Date of Construction: c. 1890; relocated in 1923

Present Owner: Burlington Northern Railroad
373 Inverness Drive South
Englewood, Colorado 80112

Present Use: Abandoned. Potential reuse by the city of Denver has
been proposed.

Significance: The Cherry Creek Railroad Bridge is a single span
wrought iron or steel through Pratt truss and is one
of the few remaining examples of this once-common
bridge type in Denver. The bridge features a unique,
decorative portal bracing, a prevalent characteristic
of late 19th century bridgee.

Historian: Rebecca Herbst
October 1988

I. HISTORY

Denver's railroad era began in 1870 with the arrival of the Denver Pacific and the Kansas Pacific railroads. These lines provided connections to Kansas City and to the Union Pacific's transcontinental line at Cheyenne, giving the city its long-awaited outlet to the east. Over the next decade, local financiers organized a number of independent branch lines, connecting Denver with points east and west, as well as to the principal mining centers of the state.

During the 1880s, the Denver railroad network continued to grow, concentrated along a well-defined rail spine down the South Platte River. With its ideal proximity to the industrial and warehouse sectors of lower downtown and West Denver, the central South Platte Valley became a prime location for railroad facilities. By the latter half of the decade, the Denver & Rio Grande, the Atchison, Topeka & Santa Fe, and the Burlington & Missouri River railroads all had erected facilities along the banks of Cherry Creek. Coinciding with this development was the construction of a number of railroad bridges across Cherry Creek, from Wynkoop to Chestnut streets.¹

In the ensuing years, the railroads built a series of spans across the creek at the present bridge alignment, just north of Delgany Street. The first such bridge, erected by the Denver, Texas & Fort Worth Railway in 1890, remained in place for merely two years.² The Burlington installed another bridge at this location between 1900 and 1905, and a parallel structure was erected in 1915 by the Colorado & Southern (C&S) [the company was acquired by the Burlington as a subsidiary in 1908].³ By 1922, only a single timber pile span remained, which the C&S proposed to replace with a through plate girder and a truss bridge at separate alignments.⁴ The following year, the C&S relocated the Chestnut Street truss bridge (HAER No. CO-57) to Delgany Street, as the company had planned to replace it with a four track, double truss bridge to be shared with the Chicago, Burlington & Quincy.⁵ A second structure - the present Cherry Creek Railroad Bridge - was installed simultaneously, about a hundred feet to the north (halfway between Delgany Street and the Delgany/Chestnut alley).

Rather than the plate girder bridge originally proposed by the C&S, the Cherry Creek Railroad Bridge consists of a single span 105-foot Pratt through truss removed from another crossing (location unknown). Probably built about 1890, the five-panel truss (each panel 20 feet 10 inches long) is comprised of Carnegie steel or wrought iron components. Pinned connections are used to connect the major structural members. Channel sections with riveted lacing bars and cover plates are utilized for the upper chords, end posts and verticals. The lower chords and outer panel diagonals consist of flat die forged eyebars, and the center panel

diagonals and top and bottom lateral bracing members are square eyebars with turnbuckles. Metal I-beam floor beams and stringers are utilized in the floor system. The structure is supported on concrete abutments and a timber pile bent on the east end and overlaps the retaining wall on the west bank by several feet.

A typical example of the common pin-connected Pratt truss, a type favored by the railroads during the late 19th century, the bridge is unusual for its decorative portal bracing. Featured at either end of the bridge, it consists of a metal plate riveted between the end posts and portal strut, which is pierced with a quatrefoil pattern and repeated with a circular motif on the triangular supporting braces. This decorative motif appeared in a number of variations in many 19th century railroad bridges, such as those of the Keystone and Phoenix Bridge companies.

The Cherry Creek Railroad Bridge, abandoned by the railroad in recent years, has been partially dismantled, with part of the deck and floor system removed. Although not original to this site, the bridge is significant as one of the few remaining examples in Denver of the pin-connected Pratt truss, a once-common bridge type. It is also notable for its decorative portal bracing, a unique example of the detailing characteristic of late 19th century bridges.

II. FOOTNOTES

- 1 H. Weige, Perspective Map of the City of Denver (Milwaukee: American Publishing Company), 1889.
- 2 The bridge appears on the 1890 Sanborn Map of Denver, but disappears from city maps after 1892.
- 3 Baist's Real Estate Atlas of the City of Denver (Philadelphia: G. W. Baist, 1905); Halbert W. Marsh, Marsh's Real Estate Map of the City and County of Denver (Denver: H. W. Marsh, 1918).
- 4 H. L. Aulls, Memo, Water Flow Tabulations for Cherry Creek Bridges, February 19, 1922, located at the Denver Public Library, Western History Collections (clippings file).
- 5 Burlington Northern Railroad, Denver, Colorado, Bridge Records, Structure B027.a.

III. BIBLIOGRAPHY

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Burlington Northern Railroad, Denver, Colorado. Bridge Records, Cherry
Creek Railroad Bridges, Structures B027.a-B027.d.